STA-RITE® HMS Series

Cast iron, horizontal multi-stage



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HMS Series Multi-Stage Jet Pumps are the highest performing pumps available in its category. The HMS Series Convertible Jets utilize the built-in regulator, offering easier priming and better range of performance from a complete line of Shallow Well, 4" Double Pipe, 2" and 3" Single Pipe Jet Packages. Pump may also be operated as a self-priming centrifugal (to 25 ft.) to provide a wide range of high pressure applications.

APPLICATIONS

Water systems and sprinkling... for homes, farms and cottages.

SPECIFICATIONS

Body: One-piece rugged cast iron

Pump and Motor Shaft:

416 stainless steel

Impeller: Polycarbonate

Diffuser: Corrosion-resistant cast iron **Pressure Switch Pre-Set:** 30–50 PSI

Suction Ports: Drive-over-Suction

ORDERING INFORMATION										
CATALOG	НР	DESCRIPTION	PIPE	TAPPING	SIZES	STAGES	MOTOR	APPROX. WT. LBS.		
NUMBER	'''	DESCRIPTION	SUCT.	DRIVE	DISCH.	SIAULS	VOLTAGE			
HMSD	3/4	Deep Well Jet	1-1/4"	1"	1"	2	115/230	50		
HMSE	1	Deep Well Jet	1-1/4"	1"	1"	2	115/230	80		
HMSF	1-1/2	Deep Well Jet	1-1/4"	1"	1"	2	115/230	85		

AUTOMATIC PRESSURE REGULATOR – DEEP WELL									
CATALOG NUMBER	DESCRIPTION	APPLICATION	APPROX. WT. LBS.						
PKG 107	Regulator, tubing, pipe plug and compression fitting	Required for ALL deep well installations	4						

FEATURES

Automatic Pressure Regulator: Fasteracting and quieter, design eliminates "hunting" for correct drive pressure. New improved stem and guide are precisely molded to assure efficient, trouble-free performance on all deep wells. See ordering information (deep well only).

Quality Construction: Close-grained cast iron pump body is rugged, one-piece unit, specially treated to resist corrosion. Drain port provided for easy winterizing.

Precision-Machined Diffusers:

Assure faster priming.

Mechanical Shaft Seal: Precision-lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication for maximum protection.

Polycarbonate Impellers: Precision-molded for perfect balance, and ultrasmooth for highest performance and efficiency.

Motor Windings: Superior insulation materials protect against excessive moisture and contaminants to ensure prolonged motor life.

Dustproof Cover: All electrical components are protected from dirt, dust and insects by a dustproof canopy. Ventilating air cannot contaminate vital switching components. This eliminates the most common cause of motor failure.

Balanced Rotor: Diecast under high pressures for uniform performance and greater efficiency...dynamically balanced.

Heavy-Duty Ball Bearings: Shielded, permanently lubricated bearings are extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft: Stainless steel for maximum corrosion resistance; one-piece threaded shaft for positive impeller drive and alignment.

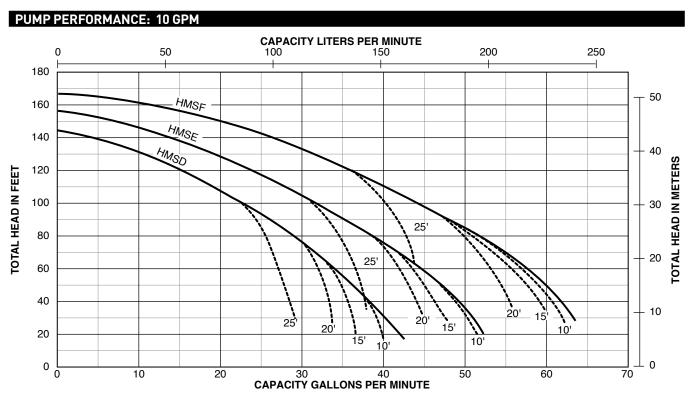
Order pump and pressure regulator, if required, from ordering information tables above.

A Jet Package and the Automatic Pressure Regulator, described above, are required on all deep well installations.



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NOTE: Dotted lines indicate performance reduction at high suction lift.

PUMP PER CENTRIFU	PUMP PERFORMANCE (Capacity in gallons per minute) CENTRIFUGAL APPLICATION									
CATALOG	НР	TOTAL SUCTION		SHUT-OFF PRESSURE						
NUMBER	пР	LIFT FT.	20'	30'	40'	50'	60'	PSI		
		5	37	30	24	15		60		
		10	35	29	21	13		60		
HMSD	3/4	15	33	27	19	9		60		
		20	32	26	17	6		60		
		25	31	24	15			60		
	1	5	47	40	33	24	10	65		
		10	46	38	31	21	7	65		
HMSE		15	44	36	28	18		65		
		20	42	35	26	15		65		
		25	41	33	24	12		65		
		5	60	53	46	36	23	68		
		10	58	52	43	33	21	68		
HMSF	1-1/2	15	56	49	41	30	16	68		
		20	55	47	39	27	12	68		
		25	54	41	36	25		68		

Tested and rated in accordance with Water Systems Council Standards.

NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure. PKG 107 Regulator, tubing, pipe plug and compression fitting is required for all DEEP WELL installations.

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CATALOG	НР	JET*	USES	USES	DISCH.		TOTAL	SUCTION LI	FT FT.	
NUMBER	HP	NUMBER	VENTURI	NOZZLE	PRESS. PSI	5'	10'	15'	20'	25'
					20	9.6	8.2	7.0	5.8	3.9
					30	9.1	7.9	6.5	5.6	3.9
					40	8.8	7.7	6.3	5.6	3.9
HMSD	3/4	PKG 1 - 29SD	N32P-66B	J34P-41	50	8.5	7.6	6.2	5.6	3.9
пмэр	3/4	PNG 1 - 273D	N32P-00D	J34P-41	60	7.7	7.3	6.2	5.6	3.9
					70	5.5	5.1	4.7	4.2	3.6
					80	3.5	3.1	2.8	2.3	1.9
					Shut-off	102	96	96	96	90
			N32P-67B	J34P-44	20	13.0	11.2	9.8	7.8	5.8
					30	12.5	11.0	9.5	7.6	5.7
					40	12.2	10.9	9.4	7.6	5.7
HMSE	1	PKG 1 - 10SD			50	12.1	10.8	9.2	7.6	5.7
IIIVISL	'	1 KO 1 - 103D			60	12.0	10.8	9.2	7.6	5.7
					70	10.2	9.6	8.6	7.4	5.7
					80	7.4	6.8	6.2	5.5	4.8
					Shut-off	108	108	108	102	102
					20	15.9	13.3	12.2	9.6	7.0
					30	15.6	13.2	12.2	9.5	7.0
					40	15.3	13.1	12.1	9.4	6.9
					50	14.9	13.0	11.9	9.3	6.8
HMSF					60	14.4	12.9	11.7	9.2	6.7
	1-1/2	PKG 1 - 10SD	N32P-67B	J34P-44	70	13.7	12.7	11.5	9.0	6.6
					80	12.6	12.1	10.8	8.7	6.4
					90	9.5	8.5	7.8	7.2	5.7
					100	5.9	5.0	4.4	3.8	3.2
					Shut-off	120	120	114	114	108

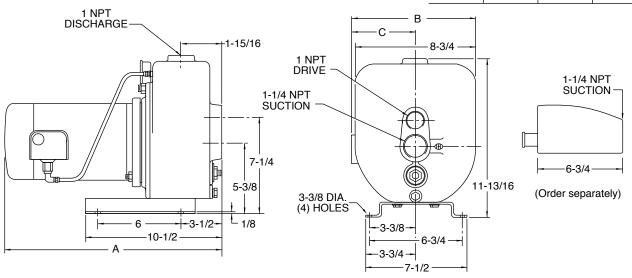
^{*} Order Jet Package separately.

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Pumps installed with a conventional tank require a 75 PSI relief valve.
Relief valve must be capable of relieving entire flow of pump at relief pressure.

OUTLINE DIMENSIONS

CAT. NO.	Α	В	С
HMSD	16-7/8	9-1/2	5-1/8
HMSE	17-3/4	9-1/2	5-1/8
HMSF	18-1/4	10	5-5/8



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Dimensions (in inches) are for estimating purposes only.

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DEEP \	WELL	2" SING	CE (Capacit	40 PSI															
CAT. NO.	НР	JET NO.	USES	USES						PUI	MPING	DEPT	HINF	EET		1			
			VENTURI	NOZZLE	20'	30,	40'	50'	60'	70'	80,	90'	100'	110'	120'	130'	140'	150'	160
		13AP	J32P-26	J34P-44	12.0	10.8	9.6	8.1	6.9	5.5									
HMSD	3/4	22AP	J32P-22	J34P-43					7.9	6.7	5.5	4.7	3.9	3.0					
		8AP	J32P-18	J34P-42									4.0	3.6	3.1	2.7	2.2		
		5AP	J32P-29	J34P-41	16.3	15.6	14.1	12.0	9.9	8.2	6.0								
HMSE	1	4AP	J32P-24	J34P-41					8.9	7.9	7.0	5.8	4.7	3.6	2.5				
		19AP	J32P-20	J34P-43											4.0	3.2	2.3	1.8	1.3
		15AP	J32P-33	J34P-41	20.0	18.5	17.0	13.6	10.4	7.6	5.0								
HMSF	1-1/2	9CP	J32P-26	J34P-41					10.6	9.2	8.0	6.0	4.5	3.7	3.0	2.2			
		23AP	J32P-20	J34P-44											4.3	3.5	2.7	2.4	2.0
DEEP \	WELL:	3" SING	LE PIPE:	40 PSI															
		17CP	J32P-29	J34P-44	12.8	11.5	10.2	8.9	7.6	6.1									
HMSD	3/4	18CP	J32P-24	J34P-44					7.8	6.9	6.0	5.3	4.5	3.6					
TIMOD	3/4	16CP	Factory Installed										5.0	4.4	3.9	3.4	3.0	2.5	2.0
LIMCE	1	7CP	J32P-32	J34P-41	17.8	16.2	14.6	13.0	11.4	9.6	7.7								
HMSE	1	9CP	J32P-26	J34P-41					10.7	9.8	9.0	7.9	6.7	5.8	5.0	4.1			
		10CP	J32P-38	J34P-45	21.7	19.7	17.9	15.9	14.0	11.0	8.0								
HMSF	1-1/2	9CP	J32P-26	J34P-41					11.1	10.8	10.6	9.7	8.9	7.5	6.5	5.5			
111131	1 1/2	19CP	Factory Installed	J34P-41											6.9	6.1	5.3	4.6	4.1
DEEP \	WELL	4" DOU	BLE PIPE	: 40 PSI															
		CK2	J32P-29	J34P-44	12.8	11.5	10.2	8.9	7.6	6.1									
HMSD	3/4	CK2	J32P-24	J34P-44					7.8	6.9	6.0	5.3	4.5	3.6					
ПМЭП	3/4	15SD	Factory Installed										5.0	4.4	3.9	3.4	3.0	2.5	2.0
		CK3	J32P-32	J34P-41	17.8	16.2	14.6	13.0	11.4	9.6	7.7								
HMSE	1	CK3	J32P-26	J34P-41					10.7	9.8	9.0	7.9	6.7	5.8	5.0	4.1			
		CK1	J32P-20	J34P-43											5.0	4.5	3.9	3.5	3.0
		CK4	J32P-38	J34P-45	21.7	19.7	17.9	15.9	14.0	11.0	8.0								
		CK3	J32P-26	J34P-41			,		11.1	10.8	10.6	9.7	8.9	7.5	6.5	5.5			
HMSF	1-1/2	4SD	Factory Installed	30.77						. 3.3	. 3.3	,,,	0.,	7.0	6.9	6.1	5.3	4.6	4.1

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CATALOG NUMBER	DESCRIPTION	APPLICATION	APPROX. WT. LBS.						
PKG 107	Regulator, tubing, pipe plug and compression fitting	Required for ALL deep well installations	4						



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